Abstract

A method and apparatus for increasing the capacity of a multiple-input and/or multiple-output system. Each sub-stream of a primary data stream is stratified to produce a processed sub-stream whose strata can be separated out and decoded with an acceptable error rate. A sub-stream can be stratified by dividing it into a plurality of sub-stream-components that are processed to obtain strata, with each stratum representing one of the sub-stream-components. The strata are then combined to obtain the processed sub-stream. Stratifying allows a particular processed sub-stream's strata have different transmit features from each other, such as different bit rates, or different power levels, or both. This reduces the interference for some of the strata of each processed sub-stream since as stratum are separated out and decoded they are no longer interference for the other strata. Thus, allowing for a higher overall bit rate for the processed sub-streams.